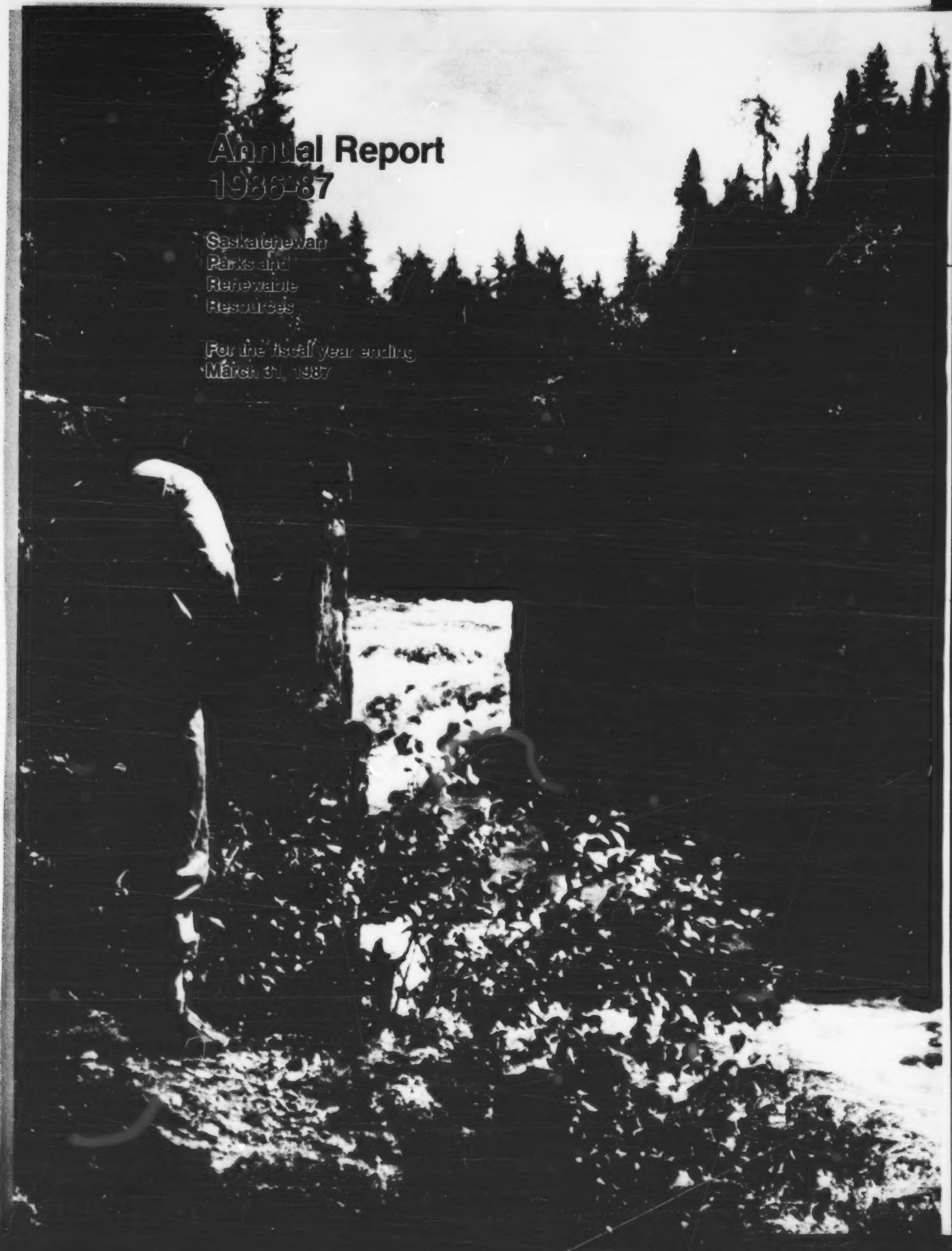

Annual Report 1986-87

Saskatchewan Parks and Renewable Resources

For the fiscal year ending March 31, 1987

Saskatchewan Parks and Renewable Resources Mission

The mission of Saskatchewan Parks and Renewable Resources is to conserve, develop and manage Saskatchewan's fish, forests, parks, resource lands and wildlife in a manner which optimizes recreational opportunities, quality of life and economic benefits to the people of Saskatchewan, while maintaining these resources in perpetuity.

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Title page: Skull Canyon on the Clearwater River, Saskatchewan's first wilderness provincial park.

Minister's Transmittal

October 30, 1987

To the Honourable F. W. Johnson
Lieutenant-Governor of the Province of Saskatchewan

Sir:

I have the honour to submit the 1986/87 annual report for the Department of Parks and Renewable Resources.

The year under review was highlighted by the introduction of a number of important new initiatives.

The new Parks Act was passed on August 14, 1986. This forward-looking act was judged by the Federal Provincial Parks Council to be one of the best park-related pieces of legislation in Canada. It considers the present and future recreational needs of Saskatchewan people and visitors to the province and provides long-term management direction according to the primary purpose of each park.

Under The Parks Act, five new provincial parks were established, nine historic parks reclassified as provincial parks, and three existing parks increased in size, for an overall increase in provincial park lands of 83 per cent.

One of the new provincial parks established under The Parks Act is Saskatchewan's first wilderness provincial park — the Clearwater River Provincial Park. In June, the Clearwater was also officially designated a Canadian Heritage River which will ensure the protection of its heritage values.

This year was characterized by a high degree of co-operation among organizations at the provincial, national and international level in dealing with the problem of declining waterfowl populations. The number of Saskatchewan's Heritage Marshes -- critical waterfowl breeding and staging wetlands -- was increased by 12 to a total of 20 under a Third Generation Agreement signed by the department, Ducks Unlimited, the Saskatchewan Wildlife Federation and the Saskatchewan Natural History Society. The agreement also brought Wildlife Habitat Canada into the Heritage Marsh Program as a full partner.

The North American Waterfowl Management Plan, signed by Canada and the United States in May, dovetails with the Heritage Marsh Program in its efforts to restore waterfowl populations to levels of the 1970s. Working with Canadian and American wildlife agencies, Saskatchewan will play a major role in the development and protection of important wetlands under the plan.

The year for the province's fisheries resource was significant in several areas. The stocking program was the most extensive ever, largely due to the increased capabilities of the recently renovated Fort Qu'Appelle Fish Culture Station.

The number of special fish dealers under the Fish Marketing Program increased from two to six during the year, indicating interest and success in providing the Saskatchewan consumer with fresh high-quality Saskatchewan fish. The program also helps to stimulate the commercial fish industry by providing Saskatchewan fishermen with a wider in-province market.

In June, The Forest Act was amended to address the concerns of the forest industry while maintaining the principles of sound forest management. The amendment has two key objectives; to provide forest companies with a secure fibre base and security of tenure within the limitation of the resource base, and to conduct relations with the forest industry through contractual arrangements that specify the terms and conditions of operations.

During 1986/87, new Forest Management Licence Agreements (FMLAs) were signed with Weyerhaeuser Canada Ltd, Prince Albert and L & M Wood Products, Glaslyn. The new FMLAs have significant benefits for Saskatchewan forest resources and for those who derive their livelihoods from that resource. These FMLAs will ensure that all logging is followed by appropriate forest renewal and management. In addition, timber development will be carried out within the context of long-term forest management plans in which other forest resource values will be effectively considered.

The new Geographic Information System (GIS), purchased by the department through the Canada/Saskatchewan Forest Resource Development Agreement, will greatly improve the department's resource management capability. This computer technology will allow the department to collate, integrate and analyze data from the five resource branches in order to provide better and faster information upon which to base resource management decisions. The geographically-referenced information will also enable the department to react more quickly and effectively to potential renewable resource problems.

The staff who plan, develop and implement the department's programs are people committed to the concepts of effective resource management and conservation. Their efforts and initiatives throughout the year will prolong the use and enjoyment of Saskatchewan's wildlife, fish, forests, parks and Crown resource lands by future generations.

Respectfully submitted,

Colin Maxwell

Colin Maxwell

Deputy Minister's Transmittal

October 30. 1987

To the Honourable Colin Maxwell
Minister of Saskatchewan Parks and Renewable Resources

Sir:

I am pleased to submit the annual report for the Department of Parks and Renewable Resources for the year ending March 31, 1987. I would like to acknowledge the contribution of John C. Law, Deputy Minister of the department during the year under review.

Respectfully submitted,

Douglas Cressman
Deputy Minister
Saskatchewan Parks, Recreation and Culture

Financial Statement

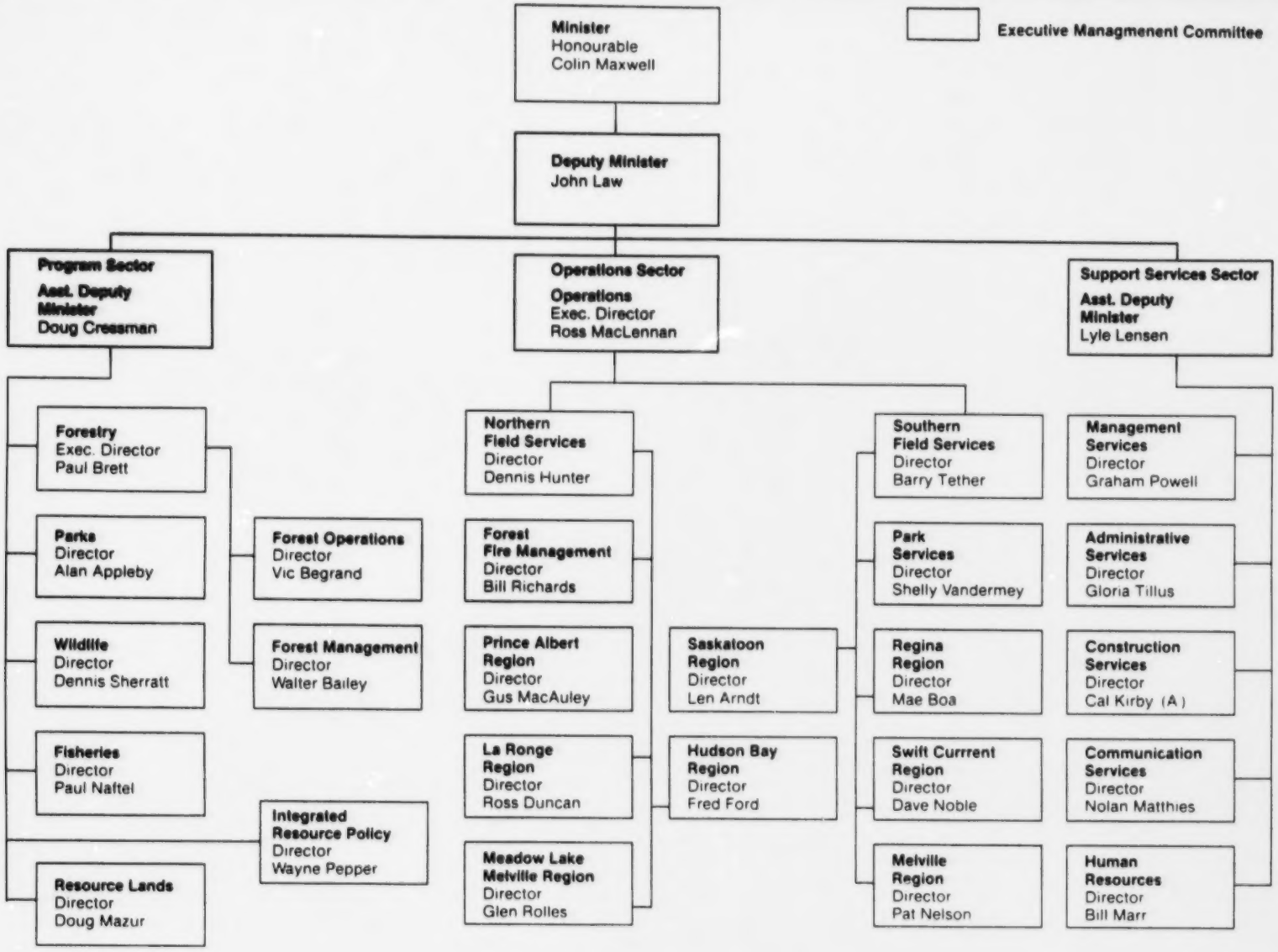
This financial statement includes only the revenue and expenditures directly recorded in the Consolidated Fund.

Receipts and Disbursements

Disbursements	61,036,854
Receipts	12,128,950
Excess of Disbursements over Receipts	48,907,904

Receipts	**1982/83**	**1983/84**	**1984/85**	**1985/86**	**1986/87**
Fisheries	1,059,100	1,122,583	1,862,869	1,890,846	1,954,577
Wildlife	2,608,300	3,575,976	3,647,918	3,585,902	3,661,416
Lands	145,100	183,645	165,689	268,181	248,271
Parks & Recreation	*	*	*	*	*
Forestry	2,743,900	3,821,031	3,699,666	3,606,926	4,058,952
Miscellaneous	3,600,700	3,381,811	2,017,870	1,484,219	2,205,734
Total	10,157,100	12,085,046	11,394,012	10,836,074	12,128,950
Disbursements					
Ordinary	49,088,090	50,924,939	66,486,470	57,797,154	57,490,167
Capital	2,531,300	2,827,877	3,679,442	3,850,476	3,546,687
Total	51,619,390	53,752,816	70,165,912	61,647,630	61,036,854

* Included in Commercial Revolving Fund


Executive Managmenent Committee
Minister
Honourable
Colin Maxwell
Deputy Minister
John Law
Program Sector
Asst. Deputy Minister
Doug Cressman
Operations Sector
Operations
Exec. Director
Ross MacLennan
Support Services Sector
Asst. Deputy Minister
Lyle Lensen
Forestry
Exec. Director
Paul Brett
Parks
Director
Alan Appleby
Wildlife
Director
Dennis Sherratt
Fisheries
Director
Paul Naftel
Resource Lands
Director
Doug Mazur
Forest Operations
Director
Vic Begrand
Forest Management
Director
Walter Bailey
Integrated Resource Policy
Director
Wayne Pepper
Northern Field Services
Director
Dennis Hunter
Forest Fire Management
Director
Bill Richards
Prince Albert Region
Director
Gus MacAuley
La Ronge Region
Director
Ross Duncan
Meadow Lake Melville Region
Director
Glen Rolles
Saskatoon Region
Director
Len Arndt
Hudson Bay Region
Director
Fred Ford
Southern Field Services
Director
Barry Tether
Park Services
Director
Shelly Vandermey
Regina Region
Director
Mae Boa
Swift Currrent Region
Director
Dave Noble
Melville Region
Director
Pat Nelson
Management Services
Director
Graham Powell
Administrative Services
Director
Gloria Tillus
Construction Services
Director
Cal Kirby (A)
Communication Services
Director
Nolan Matthies
Human Resources
Director
Bill Marr

Department Organization

The department is broadly organized into three major sectors: Programs, Support Services and Operations. The three sectors work together to provide integrated management of the province's renewable resources and delivery of services.

Programs

The Program sector includes six branches responsible for developing integrated policy and programs related to Saskatchewan's parks, wildlife, forestry, fisheries and resource lands.

Provincial parks, recreation sites, campgrounds and provincial historic parks are developed and managed through comprehensive planning, policy and programming provided by the Parks Branch. Park management strategies, facility development plans and park visitor programs are key responsibilities. The branch also administers the Regional Parks Program, supporting local operation of 101 regional parks throughout the province.

The Wildlife Branch manages the wildlife resources for the benefit and use of Saskatchewan residents. It sets hunting seasons, regulates hunters, reintroduces extirpated wildlife species to the province, develops programs to prevent wildlife damage to agricultural produce and property and administers the Firearm Safety/ Hunter Education Program. It designs and promotes programs that enhance the co-existence of wildlife and agriculture in Saskatchewan. Important wildlife production habitats secured under the Fish and Wildlife Development Fund are administered by the Wildlife Branch.

The role of the Forestry Branch is to develop and administer programs for the management of the provincial forest resources. Programming is directed particularly at optimizing social and economic benefits accruing from the forest resources for present and future citizens of Saskatchewan. To facilitate the implementation of forestry programs, the branch is organized into five sections: Forest Inventory, Timber Management, Administration, Silviculture and Regional Operations.

Management of the Saskatchewan fishery is the responsibility of the Fisheries Branch. Programs are designed to maintain fish stocks through fish conservation by regulating fish harvest and protecting fish habitat. Enhancement programs to increase fish stocks and broaden the range of fishing opportunities are also undertaken. The branch is responsible for monitoring the status and health of fish stocks, mobilizing underdeveloped economic potential in the fishery and allocating fish stocks to various user groups for optimum benefits to Saskatchewan residents.

Resource Lands Branch administers the use, disposition and management of the province's 31.5 million hectares of Crown resource lands. It develops and co-ordinates plans, policies, procedures and program alternatives to allocate and manage resource lands for the continuous social and economic benefit of Saskatchewan people.

The Integrated Resource Policy Branch provides leadership, expertise and support for integrating resource management in the department. It seeks to ensure that all concerns and interests associated with resource management are addressed during the decision-making process.

Operations

The Operations Division is responsible for delivering department programs to the public. Its activities include implementation of forestry, fisheries, wildlife, parks and resource lands programs at the regional and district levels.

The division's activities are carried on throughout the province by the Saskatoon, Melville, Regina and Swift Current Regions and the Park Services Branch in the Southern Field Services Division and by the Meadow Lake, Prince Albert, Hudson Bay and La Ronge Regions and the Forest Fire Management Branch in the Northern Field Services Division.

Operating and maintaining provincial parks, recreation sites, picnic sites and campgrounds accounts for nearly one-half of regional activities. This includes construction and maintenance of facilities, upkeep and enhancement of park grounds, provincial park security, providing information and direction to visitors, operating recreation facilities such as golf courses and pools, and providing interpretive, recreation and aquatic programs. Winter activities include cross-country ski and snowmobile trail construction and maintenance, as well as operation of downhill ski facilities.

The Parks Services Branch provides central services and management guidance for park operations including maintenance, customer services, commercial operations and leases. The branch also operates the Echo Valley Conference Centre.

Forestry and forest fire management account for over one-third of Operations' activities. A variety of forest use permits are issued, inspections are made, and trees are planted. The Forest Fire Management Branch provides central services for forest fire prevention, detection and fire suppression, aircraft contracting, equipment supply, technical services and staff training.

Operations is responsible for enforcing all acts and regulations dealing with wildlife, fisheries, forestry, resource lands and parks. Wildlife activities concentrate on poaching, night hunting and illegal traffic of wildlife. Other wildlife activities include prevention of damage to crops or property by beaver, bear, and other big game and waterfowl, as well as assisting in wildlife surveys.

Fisheries work includes enforcement of sport, commercial and domestic fishing regulations, stocking of waterbodies, and capital development of fish enhancement projects.

Activities related to Crown resource lands include issuing land use leases and permits related to wild rice and surface disposition for mineral exploration. A variety of land use inspections are performed to ensure compatibility with the resources under the department's jurisdiction.

Support Services

Support Services provides ongoing support for the achievement of the overall goals of the department. It consists of five branches:

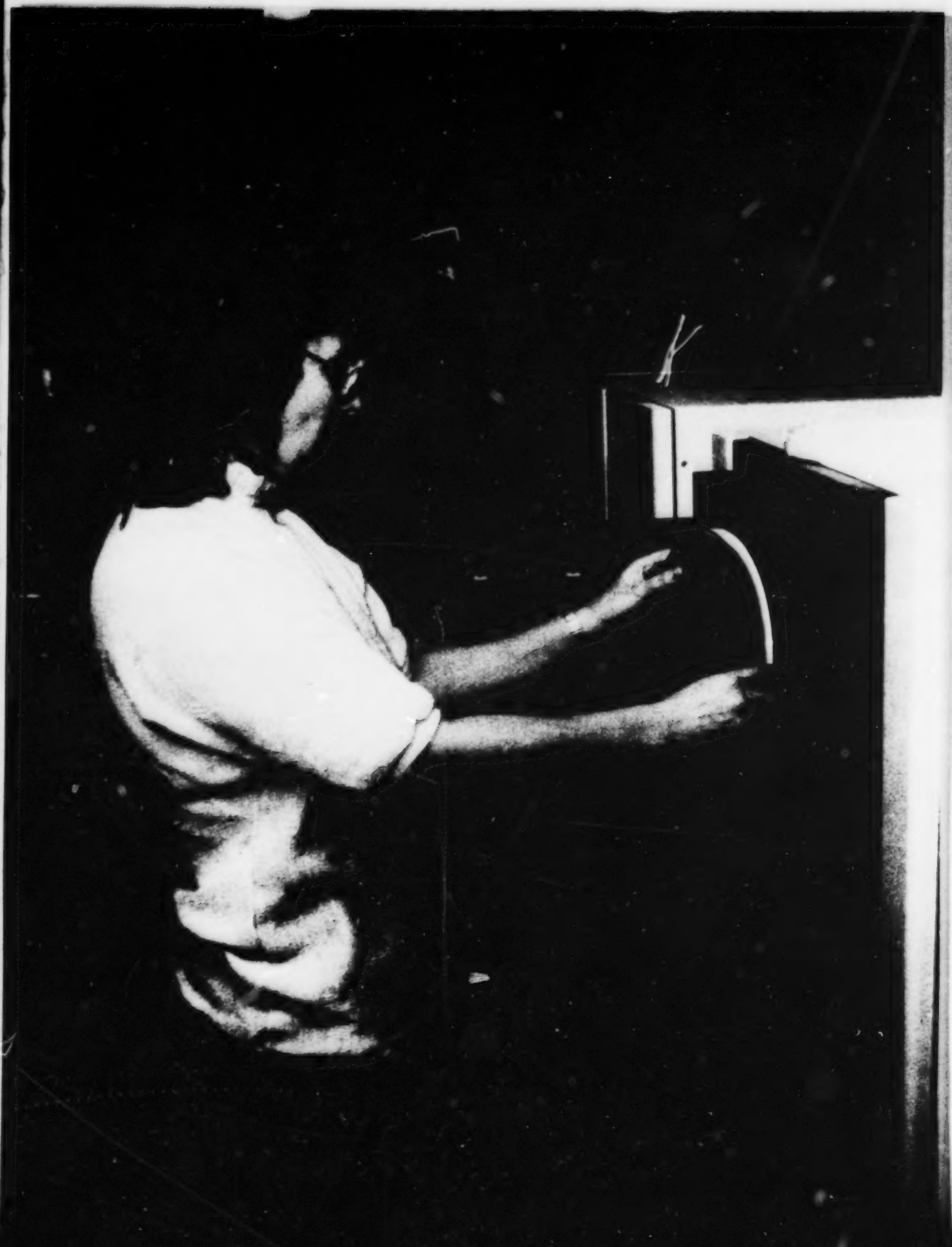
The Administrative Services Branch is responsible for the department's payroll; revenue and expenditure processes; licence vendor services; and financial statements for the Fish and Wildlife Development Fund and the Commercial Revolving Fund. It also performs audits of the forest industry, regional parks, and department field offices.

Management Services Branch provides central planning and management services including budget co-ordination and analysis, co-ordination of productivity improvement initiatives and development of goals and objectives, statistics collection and evaluation, management information system design and co-ordination, and management/operational audits.

Effective communication and promotion of the department's programs and policies within the department and to the public are provided by Communications Services Branch.

The design and project management of buildings, roads, services and facilities in parks and on resource lands are provided by Construction Services Branch. The branch also administers the Resource Protection and Development Revolving Fund and the province's radio communications; and it prepares and manages the capital budget.

Human Resources Branch provides personnel management services to line managers and employees in the form of training and development, staffing, classification, labour relations and day-to-day personnel services.



Departmental Accomplishments

Department internal affairs' management provides effective and efficient conservation, development and management of Saskatchewan's renewable resources.

Internal Management

Productivity Improvement Initiatives

Management productivity improvement included:

- completing an Information Management Strategic Plan
- starting a systems acquisition and training plan
- conducting program audits and operations reviews

Professional, technical and clerical productivity improvement included:

- improving technology and upgrading equipment
- conducting in-house skill development programs
- improving project management methods

Workforce management productivity continued public relations effectiveness and hospitality training for front-line summer staff, commercial managers and maintenance and construction staff.

Enforcement Operations

The Provincial Enforcement Co-ordinator's activities included liaison with other Canadian and international resource enforcement agencies. An assistant, hired in July 1986 as Northern Enforcement Specialist, co-ordinated enforcement operations in northern Saskatchewan and liaised with native groups on enforcement concerns.

Integrated Resource Management

The new Parks Act, Wildlife Act and Forest Act were among the many regulations and legislation pieces prepared this year, requiring co-ordination of input from the several branches involved. Staff conducted economic analyses of several department programs. The department also contributed to several multi-disciplinary projects like the Rafferty-Alameda project, and several Indian economic development initiatives.

Training and Development

The year's activities focussed on refining needs analysis and maintaining records on computers. Computer records of training and development information makes possible data and reports on:

- skills and needs analysis
- individual employee training history
- training/development activity and cost analysis
- Workers' Compensation claims analysis
- department organization charts

Employees spent 3,017 person days at training and development courses presented by the Public Service Commission, educational institutions, consultants and department training staff.

The department began offering staff training sessions in the regions this year. One hundred and forty-two employees attended the eight two-day workshops on corrective discipline, performance improvement, employee assistance and grievance handling. As well, 75 conservation officers attended three one-week resource enforcement seminars.

The Occupational Health and Safety policy became effective January 1, 1987, and a department plan for Employment Equity was forwarded to the Public Service Commission.

Human Resources

There were 411 staffing transactions this year. Staff completed classifications on 21 Labour Service positions and 125 in Classified Service.

During the year, staffing and classification authority was returned to the Public Service Commission, but department staff retained responsibility for personnel support to Saskatchewan Culture and Recreation.

Seven formal grievances were raised with the department; six were resolved prior to reaching arbitration; one remains outstanding at year end.

The department this year introduced an Employee Recognition program. It's low-key approach has proven most successful.

Department Re-organization

Administrative amalgamation of some districts reduced operational costs this year. Pike Lake and Blackstrap amalgamation was completed, while Wollaston was re-aligned to the Southend district.

A network of regional land offices was established to provide better client services and improve delivery of Crown resource land programs. Regional land managers were placed in La Ronge, Meadow Lake, Prince Albert and Regina.

Left: The GIS computers, installed in Prince Albert and Regina will assist in integrating the department's resources.

Program Accomplishments
Wildlife

Approximately 80 per cent of Saskatchewan adults use wildlife in ways which enhance their quality of life. Consumptive uses of wildife include hunting and trapping. Non-consumptive uses include photography and enjoyment by naturalists. Estimated expenditures by Saskatchewan residents for recreational hunting and non-consumptive uses of wildlife are more than $172 million annually.

Habitat Protection

Critical Wildlife Habitat Protection Act

The Critical Wildlife Habitat Protection Act was administered on the 485,640 hectares of agricultural Crown land designated to date. Critical wildlife habitats identified along the forest fringe were reviewed in preparation for formal designation.

Fish and Wildlife Development Fund (FWDF)

During the year, 1,995 hectares of habitat were purchased under the wildlife component of the FWDF. This land consists of excellent white-tailed deer and grouse habitat in the parkland. The Fund now holds about 32,376 hectares.

The Heritage Farmstead Program, part of the FWDF, progressed through its second year. Saskatchewan Wildlife Federation co-operators enrolled 92 abandoned farmsteads, bringing the program total to 243.

Heritage Marsh Program

The Heritage Marsh Program partners -- the department, Ducks Unlimited, Saskatchewan Wildlife Federation and Saskatchewan Natural History Society -- negotiated a Third Generation Agreement identifying an additional 12 marshes and bringing Wildlife Habitat Canada into the program as a full partner. This agreement brings the total number of existing and planned Heritage Marshes to 20. Work continued on the four undeveloped basins of the original eight marsh areas.

Prairie Pothole Project

With financial assistance from Wildlife Habitat Canada, the department began Phase II of the Prairie Pothole Project in the Redvers area. The pilot project identifies ways to conserve prairie pothole or slough waterfowl breeding habitat that are compatible with needs of the private landowner.

Area farmers have been receptive to the project. By year-end, about one-quarter of the land in the project area had been offered for inspection and 229 hectares had been secured by agreement. Fifty duck nesting structures were installed with help from the local Saskatchewan Wildlife Federation branches.

North American Waterfowl Management Plan

The North American Waterfowl Management Plan was signed by Canada and the United States in May, 1986. Department Staff took part in inter-jurisdictional discussions to implement this plan. Saskatchewan proposals, generated in consultation with the Canadian Wildlife Service and Ducks Unlimited, included a project outline for the Quill Lakes-Touchwood Hills region.

Wildlife Depredation

Big Game Depredation

Prevention of damage to farmers' crops, property and livestock continued to be a priority of the department. During the year, department staff investigated 462 big game damage claims and provided expertise to help reduce such damage.

Along the forest fringe, electric fencing was again used to reduce black bear damage to apiaries. Instruction courses for beekeepers and electric fence material supplied in lieu of compensation payments significantly reduced bear depredation.

Intercept deer and elk feeding programs at Cypress Hills, Greenwater and Moose Mountain Provincial Parks, Big River, Thickwood Hills, and Fort a la Corne reduced damage to agricultural products. Reduction of high southwestern deer populations following the 1985 hunting seasons helped lessen damage to irrigated alfalfa crops, some grain crops and haystacks. Damage prevention techniques are being evaluated to further control deer damage problems.

Ungulate-proof fencing was supplied to 25 landowners in the south to help eliminate chronic elk and deer haystack depredation problems.

Wolf trapping was encouraged at trapper education courses to assist in reducing wolf predation of cattle along the forest fringe.

The coyote-snaring program successfully undertaken in sheep-ranching areas of the Saskatoon region was used experimentally in the Fort Qu'Appelle and Estevan areas. Results of the experiment will be known next year.

Waterfowl Depredation

Waterfowl crop damage prevention was again an important department program and an integral

Left: The T.I.P. program was immediately successful in rural areas.

part of wetland habitat development. With the wet fall and extended harvest of 1986, waterfowl damage was again one of the worst on record. Compensation payments under the federal-provincial program totalled nearly $6.5 million in 1986/87. The department operated more than 5,530 acres (2,238 ha) of permanent lure crops and 22 bait stations which were effective in controlling damage in major waterfowl staging areas.

Problem Beaver Control

The program to deal with large scale beaver problems continued in 1986/87 in co-operation with rural municipalities. Beaver-proof culvert installation was once again encouraged and 2,603 beaver dams were removed. Conservation officers handled 1,354 beaver damage complaints during the year. The number of beaver complaints has dropped in each of the past three years while the beaver harvest has increased over the same period. This trend to increased beaver harvest should help keep populations under control.

Wildlife Information and Education

Firearm Safety/Hunter Education

During 1986/87, Saskatchewan's Firearm Safety/ Hunter Education Program received an award for the most improved hunter education program in North America from the National Rifle Association. Saskatchewan was the first recipient of this new award.

During the year, 5,893 students were trained and 194 people received instructor certification compared to 4,669 and 130 respectively last year. There were 22 firearm accidents and one fatality in 1986/87, down from 30 accidents and two fatalities in 1985/86.

Project Wild

During 1986/87, 1,333 educators were trained in the use of Project Wild materials which provide conservation concepts, values and background for teaching academic skills.

A survey of elementary teachers who participated in workshops in 1985 showed that 80 per cent of them made use of the program.

Communications Programs

In 1986, the former *Hunting Synopsis and Wild Fur Synopsis* were combined into one publication, the *Hunting and Trapping Guide*, to provide more comprehensive information to hunters and trappers in Saskatchewan.

To commemorate the 100th anniversary of wildlife conservation in Canada in 1987, the department produced a short video presentation outlining highlights of Saskatchewan's wildlife conservation history.

Conservation officers attended 1,608 school classes and public meetings during 1986/87.

Threatened and Endangered Species

Endangered species programs during the year were marked by a high level of co-operation between the department and various non-government organizations.

The department was represented on the steering committee for Wild West, a World Wildlife Fund project, and participated in collecting data for its Prairie Conservation Action Plan. The department and Saskatchewan Natural History Society conducted a survey of the threatened burrowing owl in the southeast. Several wetlands were assessed for potential reintroduction of the trumpeter swan and a trumpeter swan recovery plan was developed.

Twelve eaglets were again provided to Pennsylvania for reintroduction of the bald eagle into that state. Releases of peregrine falcons by the Co-operative Falcon Project were again approved for Regina and Saskatoon.

Five more pair of swift fox were released into the wild in June, 1986 as part of a continuing effort to reintroduce the species to Saskatchewan.

Wild Fur Management

Some 19 species of wild fur bearers were harvested for commercial purposes in Saskatchewan. The sale of raw fur pelts in 1986/ 87 amounted to $7.58 million.

Fourteen trapper education courses were conducted by the department throughout the province, resulting in 352 trappers instructed in humane capture techniques, furbearer management and proper pelt handling. A new trapper education manual was introduced to compliment the course.

As part of the department's aim to enhance the fur program, about 30 pine marten were released into the wild in Cypress Hills Provincial Park. The marten were surplus animals obtained from the Fur Institute of Canada's Humane Trapping Research Centre.

Department staff contacted 3,866 trappers, made 544 Northern Fur Conservation Area inspections, contacted 477 fur dealers and issued 2,205 fur export permits during the year. .

Game Management

White-tailed Deer

More white-tailed deer hunters, higher success rates and a greater number of hunter recreation days together resulted in a higher whitetail harvest in 1986 than 1985. Over 34,700 animals were harvested.

Changes to the white-tailed deer season in 1986 included the elimination of the antlerless deer season in the southeast; the season in the southwest was extended to provide greater recreational opportunity. Eight southeastern zones were restricted to Saskatchewan resident white-tailed deer hunters.

Mule Deer

Because the record mule deer harvest in 1985 was successful in stabilizing populations in the southwest, 1986 antlerless quotas were returned to one animal per licence. This produced a decrease in the number of animals harvested, although hunter success remained high.

Elk

In 1986, the late regular elk season was closed and the season south of Prince Albert National Park was reduced from six to three weeks in an effort to reduce the bull harvest. However, a new season in the Thickwood Hills area was initiated to provide recreational opportunity from the population of transplanted elk which had grown enough to warrant a hunting season.

Bear

The 1986 bear harvest increased dramatically from the previous year with more than double the number of bears harvested. The liberal licencing system, introduced in 1984, was continued.

Woodland Caribou

In view of low woodland caribou densities, the 1986 woodland caribou season was closed in southern zones. The department also announced its intention to close all zones to woodland caribou hunting in 1987 and to review the potential for future woodland caribou seasons in Saskatchewan to be based on population status.

Barren Ground Caribou

The Caribou Management Board focussed on communications and the commercial use of caribou during the year. The newsletter, Caribou News, and the caribou school program were evaluated. A Dene language supplement to the school program was completed and will be introduced into Saskatchewan schools in the caribou range early next year.

The board reviewed all aspects of the Sask Power hydroline corridor proposal. A caribou monitoring program was agreed to by Sask Power, and the board feels confident that sufficient measures will be taken to limit caribou disturbance.

Ongoing monitoring has shown the herds to be healthy and increasing. In response to several commercial use requests, the Board began a priority list of all uses of caribou. With the caribou management plan in place and many of its strategies underway, allocating the resource among caribou users and other interest groups was the board's major function during the year.

Waterfowl

Bag limits for the 1986 hunting seasons were increased from 1985 levels to the limit of six birds daily, four of which could be mallards. This change increased recreation time for hunters and the harvest level, but kept the total harvest within international management guidelines. Goose populations remained stable and regulations were similar to previous years.

Enforcement

This year, conservation officers contacted 39,528 hunters and trappers in the field and there were 520 wildlife-related convictions. Of the convictions, 95 were related to illegal night hunting and trafficking in wildlife.

Turn In Poachers (TIP) Program

In the fall of 1986, the TIP Program was introduced to combat the serious problem of poaching in Saskatchewan. It is designed to allow anyone instant contact with a conservation officer in any area of the province 24 hours a day through a toll-free telephone number. In emergency situations, conservation officers can then be on the scene within minutes.

The TIP Program was publicized through television and radio public service announcements and a brochure distributed to wildlife clubs throughout Saskatchewan.

Up to year-end, there were 263 calls of which 229 required immediate action. Twenty-nine charges have been laid as a result of the TIP Program.

Fisheries

Saskatchewan has 68 species of fish, 21 of which are economically important. Fisheries contribute to the recreation, tourism and renewable resource industries of the provincial economy.

About 250,000 anglers fish in Saskatchewan each year. Angling is a major tourist attraction serviced by a substantial outfitter industry. Sport fishing generated an estimated $223 million in economic activity for the province.

The commercial fishery is important to northern Saskatchewan; approximately 1,400 commercial fishermen receive about $4 million for their annual harvest. The northern domestic fishery supports 700 families who depend upon fish for a portion of their diet. In addition, Treaty Indians have free access to the fishery resource for food purposes.

Fish Enhancement and Management

Enhancement Programs

The department initiated 13 new fish enhancement projects during the year. They included:

- development of walleye rearing ponds at Meadow Lake and Glaslyn.
- installation of aeration systems at Melfort and Oyama Reservoirs
- snowclearing for winterkill prevention at Twin and Sandy Beach (Holm) Lakes
- chemical rehabilitation of Big Bear and Domino Lakes and Squaw Rapids Borrow Pit
- installation of a fishway at Katepwa Lake
- trout fishery development at Brightsand Pond
- stream habitat improvement at Pine Cree Creek and Barrier River

In addition, eighteen fish enhancement projects developed in the previous two years were operated and maintained during 1986/87.

Fish Culture

A total of 229 waters were stocked with 44.5 million fish of eleven species. The pamphlet entitled "1986 Stocked Waters" was produced to provide details of the stocking program.

The highlight of the fish culture program was the exceptionally high level of production from the Fort Qu'Appelle Fish Culture Station. The number of walleye stocked was the highest in recent years due to the very successful walleye spring spawn collection of 66 million eggs.

Regional Program Delivery

Much of the regional fisheries work focussed on checking fish populations and updating fisheries management plans. A total of 148 waters were examined during the summer and the results were published in the pamphlet "Fish Facts 1986". During the winter an additional 168 waters were tested for dissolved oxygen conditions primarily to determine suitability for fisheries development. Thirty-two of the winter tests were to determine fish farming potential. Another 22 tests were carried out in areas where there was a possibility of adverse impacts from forest cutting. Forest cutting reserves were subsequently placed on a number of these areas.

A significant effort was devoted to evaluating the potential impact of 124 new outfitting proposals and 119 commercial fishing review requests.

Fish Habitat Protection Program

This program examines and, where possible, prevents potentially harmful consequences of various development proposals on fish and fish habitat.

Project reviews and inspections resulted in the issuing of 110 Shoreland Alteration Permits and 36 Fish Habitat Alteration Permits.

Enforcement

In 1986/87 a total of 49,277 anglers were contacted in the field by conservation officers, and there were 585 fisheries-related convictions.

In an effort to alleviate illegal use of small mesh gill nets in the northern commercial fishery, conservation officers checked 6,257 commercial nets and 708 domestic nets resulting in the seizure of 130 small mesh nets.

Fisheries Studies

A two-year study of the North Saskatchewan River system was completed. Data will be used to formulate a fishery management plan for the river.

A study was completed of Pinehouse Lake and surrounding lakes which concluded that the legal mesh size of commercial nets could be reduced from 12.7 cm to 11.4 cm without jeopardizing the population.

An appraisal of fish populations in Dore Lake was conducted to determine the current status of the major fish species, and to identify the reason for the sharp decline in the walleye population.

Left: Saskatchewan's environment and unique fishing opportunities attract close to 250,000 anglers each year.

The fifth of five studies initiated in 1985/86 in conjunction with the Canada Department of Fisheries and Oceans under the Economic and Regional Development Agreement was undertaken during the year. It involved a development and marketing assessment of underutilized fish species such as tullibee, burbot, mullet and carp. The report projects limited development of the rough fish resource and recommends marketing and development be left to the private sector.

Work began on the third in a series of studies undertaken at five-year intervals to determine the number of fish taken by anglers fishing in Saskatchewan and the contribution sport fishing makes to the provincial economy. The work is part of a nationally co-ordinated study undertaken by all federal, provincial and territorial fisheries agencies in Canada.

Fisheries Information and Education

A uniquely Saskatchewan "Catch and Release -- Go Barbless" logo was developed to spearhead a new campaign that encouraged anglers to release a portion of their catch to allow the fish to grow to spawning age.

Another promotion, "Don't Waste the Taste", was launched to encourage anglers to discover the fine eating qualities of burbot -- a fish that is normally discarded and wasted by many Saskatchewan anglers.

The Fort Qu'Appelle Fish Culture Station attracted more than 20,000 visitors during the year. Regional fisheries staff attended more than 100 meetings with various fishery user groups. In addition, a video on fish enhancement using rearing ponds was produced for use by the general public.

Sport Fishery

Angling

Angling continued to provide significant recreation opportunities during the year. Recreational use of the provincial fishery resulted in the sale of 186,645 angling licences for a revenue of more than $2 million.

Sport Fish Conservation Program

The second phase of the Sport Fish Conservation Program was introduced in 1986. Its objective is to provide increased protection for spring-spawning fish. Progressive season opening dates for the three management zones combined with the earlier closing date introduced in the 1985 season were implemented during the year.

Aquaculture

Fish Farming

Aquaculture or fish farming continued to emerge as a new industry in Saskatchewan. In 1986, 2,536 fish farming licences were issued of which 139 were commercial and 2,397 private. A total of 932,000 rainbow trout fingerlings were stocked, resulting in an estimated harvest of 120,000 kilograms. Production by commercial fish farmers more than doubled from 1985 to 51,200 kilograms.

Four brokers imported 485,000 fingerlings, while five private hatcheries produced 447,000 fingerlings in the spring of 1986. The private hatcheries imported 1.27 million eggs for subsequent sale as fingerlings.

Forty-seven Live Fish Import Permits were issued for the importation of rainbow trout eggs and fingerlings into the province.

A paper entitled Aquaculture Development in Saskatchewan: A Position Paper was released in June, 1986. It recommends a positive thrust in the aquaculture industry, with the private sector assuming the lead role and government having a support and regulatory role. A policy statement was subsequently drafted which will permit a much larger array of aquaculture activities in Saskatchewan.

Commercial Fishery

Commercial Fishery Harvest

A total of 1,843 commercial fishing licences were issued resulting in a total harvest of 3.74 million kilograms worth $3.1 million. Most of the production occurred in northern Saskatchewan where commercial fishing represents an important source of income. Better fish prices have contributed to an upward trend in commercial production since 1983.

Included in total commercial production are fish sold directly to Saskatchewan consumers. Approximately 574,700 kilograms of fish worth $448,620 were sold in this manner.

Sixty commercial bait fishermen harvested 17,912 kilograms of bait fish, worth $89,226.

Seven brine shrimp licences were issued resulting in total production of 49,410 kilograms.

Fur farm fishing operations took almost 44,550 kilograms of fish to feed 1,500 fur animals.

Commercial Fishing Production Incentive Program

The Commercial Fishing Production Incentive Program helps ease the high cost of transporting commercially caught fish from remote areas to market. The transportation assistance portion of the program covers 90 per cent of the cost of transporting fish from the harvest location to Prince Albert. Approximately $616,000 was provided under this program during the year.

A further $61,000 was provided under the Fish Price Support Program to improve the price paid to commercial fishermen for cutter whitefish and suckers.

Fish Marketing Program

Under the new Fish Marketing Program introduced in 1985, six special dealers were licenced to sell fish within Saskatchewan by the end of 1986. More than $200,000 was invested in infrastructure and 10 to 12 person years of employment were created. The total sales volume through the program was about 80,000 kilograms.

Emphasis was placed on the development of inspection procedures by public health inspectors and conservation officers to ensure a high level of quality control for fish marketed to Saskatchewan consumers.

Commercial Fish Conservation Program

An Action Plan was developed in 1986 to address issues facing the commercial fishery in Saskatchewan. It was based on public responses to a 1985 discussion paper entitled *Conservation Options for Commercial Users of the Fish Resource.* The main areas dealt with in the Action Plan are the prevention of highgrading, use of small mesh gill nets, commercial season dates, action against improper net use and outfitter lodge capacity guidelines. The plan will be implemented in 1987.

Resource Lands

There are approximately 31.5 million hectares of Crown resource lands amounting to approximately 53 per cent of the provincial land base. The department administers the use, disposition and management of these lands in consultation with municipalities, industry, associations, interest groups, individuals and government departments and agencies. In conjunction with its land administration, the department also implements The Outfitter and Guide Regulations and is involved in the environmental review process of The Environmental Assessment Act as well as several provincial and municipal projects related to land use.

Land Use Management and Planning

Land Management

A review of current Crown resource land issues and existing policy resulted in action on 50 new policies. Policies approved in 1986/87 included using Crown land for airstrips and temporary work camps, dispositions on mercury contaminated lakes, transfer of rights-of-way, land appraisals, assignment of leases, and using the Crown foreshore and shoreland.

A review of The Provincial Lands Act was completed. A review of The Outfitter and Guide Regulations was initiated in consultation with the Northern Saskatchewan Outfitters Association, the Saskatchewan Wildlife Federation and the outfitting industry at large.

Land Development

The department maintains an inventory of cottage and commercial development opportunities on Crown resource lands. Proposal calls were prepared for private investment in cottage subdivisions at Smoothstone Lake and at Garth, near Elbow, on Lake Diefenbaker. Several new investment opportunities were identified across the province for future proposal calls. Thirteen new commercial developments were approved for Crown resource lands.

Land Registry

The department issued 245 new surface leases, 235 temporary work camp permits, 1,265 wild rice permits and over 600 miscellaneous permits. Lease renewals totalled 209, assignments 219 and amendments 110. A total of 147 land applications were received. Outfitter licences were issued to 220 applicants. One major mineral surface lease was concluded and several others negotiated. The Crown land sales program resulted in the sale of 224 lots to communities and a total of 31 properties to individuals.

A Crown resource land registry was maintained and in excess of 8,100 land dispositions were administered. A review of lease and permit handling procedures was undertaken to co-ordinate and streamline the systems used in the Northern Saskatchewan Administration District and in southern Saskatchewan.

Land Use Inspections

During the year, department staff inspected 843 recreational leases, 297 surface leases, 56 oil sites and 152 exploration work areas. An additional 443 outfitting sites, 483 building sites and 426 miscellaneous use permit areas were checked. As well as land use areas, 569 water use inspections were carried out.

Land Use Planning

A land use plan was completed for Potato Lake, south of Air Ronge and another initiated for Smoothstone Lake in central Saskatchewan.

In co-operation with Saskatchewan Urban Affairs, zoning plans were completed for 14 northern recreational subdivisions. These plans ensure the original recreational emphasis of the subdivisions once lots are sold to individuals.

The department responded to several initiatives involving provincial Crown resource lands. These included co-ordinated department responses to Treaty Indian land claims, Crown land development proposals, the rail line abandonment program, environmental impact studies, highway closures and realignments, proposed subdivisions and municipal planning studies. The department also tabled a report on possible conversion of provincial forest land to agricultural use.

Forestry

Forests cover 29,900,000 hectares or 46 per cent of Saskatchewan's total area. Most of the province's forested lands are situated in the northern portion of the province and virtually all have been retained in public ownership. On Provincial Crown lands, the forest has been divided into two categories: the Commercial Forest zone in the south and the Northern Reconnaisance Zone in the north. For reasons of timber quality and accessibility, the Reconnaissance Zone is not considered commercially available at this time.

Forest Production and Control

Forest Industry Production and Employment

Forest industry employment, including logging, mill and office positions, totalled about 2,760 person years during 1986/87. Indirect employment such as retail sales personnel, suppliers of intermediate goods to the forestry complex and civil servants totalled about 4,375 person years.

Harvesting operations, including salvage operations, resulted in the depletion of 3,022,664 cubic metres during the year. In addition, 124,263 cubic metres were lost to forest fire.

The value of forest products based on selling prices totalled more than $265.4 million.

Administration

During the year a task force was established to review and revise the department's forestry program policies. Priority was given to developing a comprehensive statement of timber policy, addressing important issues in timber allocation, and administering the tenure system. Recommendations were subsequently prepared for departmental review.

Timber Supply Evaluation

Analyses of softwood and hardwood timber supplies were completed for all 14 of the major timber supply areas in the province. The results were used in the renegotiations of the Forest Management License Agreements (FMLAs) as well as in the identification of potential new or expanded timber utilization projects. Other major accomplishments included the evaluation of specific wood supplies for a number of potential small-scale forestry developments and the identification of areas of Provincial Forests in which harvesting is restricted. Also, assistance was provided to L & M Wood Products in the development of their 20-year forest management plan.

Timber Control

Eleven major forest industry operating plans and 24 supplementary harvesting proposals were approved. Efforts were made to focus salvage harvesting operations by major forest companies in spruce budworm-infested areas on the east side of the province.

Two scaling courses were offered and attended by 40 private and government personnel. Timber control scalers conducted checks on 48 truckloads during the year. The chief scaler developed and presented a comprehensive scaling equipment survey to the Canadian Standards Association Technical Committee.

Demands on the woodflow and timber permit information retrieval systems were significant with three major and 20 minor retreival projects completed by request.

In 1986/87, there were 5,420 field permits, 1,401 timber permits and 273 work permits issued province-wide.

Two new forest industry proposals were evaluated for the Suggi and the Vermette Timber Supply Areas.

Forest Enhancement and Protection

Canada/Saskatchewan Forest Resource Development Agreement (FRDA)

In 1986/87, approximately $2.6 million was expended in cost-shared FRDA and provincial projects. About $1.6 million of this was directed to planting 5,196,000 seedlings, site preparation of 1,040 hectares for planting and surveying 6,100 hectares of denuded forest land.

The forest protection program expended $310,000 for improvements to the weather service lightning detection system and computer operations.

Other projects were initiated in the areas of technology transfer, opportunity identification and public awareness. The federal direct contribution toward FRDA in 1986/87 was approximately $3.85 million.

Silviculture Programs

The four provincial nurseries produced 8.3 million trees with distribution primarily to provincial reforestation sites and to forest companies. During the year, 5.2 million trees were planted under 14 government contracts and 2.8 million were planted by the forest companies. Trees were

Left: Forestry continues as a leading Saskatchewan industry.

also distributed to schools, churches, youth groups and farm woodlots.

Significant improvements to the forest nurseries at Prince Albert and Big River were completed. The improvements were federal direct delivery projects within the FRDA and will ensure that quality seedlings are produced for provincial reforestation.

Forest Fire Prevention and Suppression

During the 1986 fire season, 493 fires were extinguished. This represents a 16-per cent decrease in fires compared to the previous 10-year average of 595 per year.

The 1986/87 forest fire program was considered a success with only 6,316 hectares (0.001 per cent) of forest within the primary protection zone being burned. Only 643 hectares were considered merchantable timber.

The air attack team, comprised of six Grumman trackers and three PBY-5A Cansos, dropped approximately 1,047,400 litres of retardent on 53 fires and 5,364,280 litres of water on 66 fires respectively.

The department air attack team was directly supported by privately-owned contracted aircraft consisting of three S55T Sikorsky helicopters, one 206 B Bell helicopter, one Astar 350D helicopter, two S58 helicopters and three Beach Baron fixed wing aircraft. The majority of the helicopter hours were used in conjunction with five RIACTs (Regional Initial Attack Control Teams). Helicopters worked on the fires primarily to transport firefighters and to bucket water into "hot spots". Helicopters dropped 3,316,580 litres of water onto forest fires this season.

A total of 563 people received training related to suppression of forest fires. Courses involved all levels of fire fighting and fire management. This was highlighted by training an all-woman fire fighting group at Montreal Lake. In addition, a new fire fighting manual was prepared and published by the Provincial Forest Fire Centre.

In association with the FRDA, six automated weather detection stations were purchased and installed. Complementing this extended fire weather service was an agreement with the federal Atmospheric Weather Services Department to provide a meteorologist to Saskatchewan for the next three years.

In addition, studies of the use of radar weather systems and Landsat satellite imagery systems, acquired from the National Oceanographic and Atmospheric Administration, were undertaken to assist with forest fire detection.

Insect and Disease Monitoring and Control

A monitoring program for spruce and jack pine budworm infestations continued along with other insect and disease surveys. Budworm infestation increased significantly from previous years and logging programs were undertaken in severely infested areas to reduce the impact.

In Cypress Hills Provincial Park, the mountain pine beetle infestation, which started in 1978, collapsed in 1986. No beetle attacks were observed on pheromone-baited trees. The annual logging and sanitation program continued with the harvesting of mature timber. This will enable various age classes to be established to reduce potential for future infestations.

A Dutch Elm Disease (DED) surveillance program was undertaken in July to determine the health of elm trees in the south of the province. No incidence of DED was recorded.

Forestry Information and Education

For the second year, the "If you put it out, we won't have to" forest fire prevention campaign was used. News releases, posters and advertisements carried the message to the public.

A public information and extension program about Dutch Elm Disease was initiated with a display, brochures and news media campaign. A growing number of municipalities, including Estevan and Yorkton, were active in this program.

Forestry Data

Data Base Development

A total of 138 new maps of the Commercial Forest Zone were produced at a scale of 1:12,500. The cyclical remapping program is now 93 per cent complete. An additional 170 maps were updated to reflect changes due to harvesting activities, road construction, wildfire and recreational developments.

In addition to more than 4,700 requests for aerial photograph loans, the department processed 2,125 requests for information from the computer data base to forest industry, government agencies and the general public.

Field Sampling

Field sampling was carried out to maintain an up-to-date forest information data base. Analysis of

the data results in statistics on forest condition, tree growth and site productivity, thereby providing forest managers with quantitative information for use in planning.

A total of 1,632 sample plots were established using the 3P (probability proportional to production) sampling technique.

Geographic Information System (GIS)

The GIS project was funded under the FRDA. Requests for proposals to supply a GIS were distributed to system suppliers. Subsequently, a series of benchmark evaluations were performed to determine which system suited the department's requirements. As a result of the evaluations, GIS software and associated computer hardware were purchased for the department through the FRDA. The equipment was installed in Prince Albert and Regina and operational development began in March, 1987. Use of this equipment heralds the beginning of a new era of cost and technologically efficient integrated resource management for the department.

Parks

The department is responsible for Saskatchewan's 31 provincial parks, 21 protected areas, eight historic sites and 173 recreation sites. Support funding and consultation are also provided to the 101 regional parks. In 1986, approximately 6.5 million people visited Saskatchewan's provincial and regional parks, including more than one million days of camping. Year-round programs are developed and implemented to aid park visitors in using and enjoying the full recreational, interpretive and educational potential of the provincial park system.

Park Management

The Parks Act

The Parks Act was proclaimed on August 14, 1986. It replaces The Provincial Parks, Protected Areas, Recreation Sites and Antiquities Act. For the first time, all park lands, which include provincial parks, protected areas, recreation sites and historic sites are designated and managed under one act.

All provincial parks are appropriately classified (historic, natural environment, recreation or wilderness) according to their primary purpose and to provide long-term management direction.

Nine historic parks were officially established as provincial parks. Five new provincial parks were also established: Makwa Lake, Blackstrap, Candle Lake, Crooked Lake and Clearwater River, Saskatchewan's first wilderness provincial park.

The boundaries of Lac La Ronge, Nipawin and Greenwater Lake Provincial Parks were altered resulting in the addition of 1,800 square kilometres of park land. In total, the area of land and water in provincial parks has been increased by approximately 4,144 square kilometres, an increase in area of 83 per cent.

Seven new protected areas were established to protect provincially significant natural and historic/prehistoric resources for a total of 21 protected areas.

In August, regulations were passed defining 173 recreation sites and eight historic sites as park land under The Parks Act. All 166 provincial roadside plaques are also covered by the act.

Authority is provided in the act to establish park land reserves to set aside Crown lands for future provincial parks or protected areas. This land may not be sold; however, there are provisions for various other land dispositions and continuation of existing uses. The designation is effective for a maximum of five years while public discussions take place and a final decision is made.

The Parks Act is considered to be among the best park-related legislation in Canada. The Federal Provincial Parks Council voted in January to present Saskatchewan a merit award for this accomplishment.

Park Management Strategies

As part of an ongoing park management, use and development program, park management strategies were completed for Danielson and Moose Mountain Provincial Parks, making a total of five strategies in place. Work is underway to complete strategies for Nipawin, Lac La Ronge and Saskatchewan Landing Provincial Parks.

Facility Planning

A five-year capital budget forecast was updated and compiled for all park and recreation-related projects of the department. The document guides immediate priorities as well as long-term public and private capital expenditures.

Planning and design for major park facilities included a new 40-site campground loop at Greenwater Lake Provincial Park, a development concept for a marina and additional day-use parking at Saskatchewan Landing Provincial Park, landscaping for the Pike Lake Provincial Park swimming pool and entry, power line corridor at Nipawin Provincial Park, first phases of a campground expansion at Douglas Provincial Park and campground relocation at Blackstrap Provincial Park.

Locations and conditions were determined for a variety of private commercial developments on park lands. This comprised a number of smaller projects including miniature golfs, boat rentals and stores, as well as larger developments such as marina services at Rowan's Ravine Provincial Park and lodge sites at Cypress Hills and Moose Mountain Provincial Parks.

Parks System Plan

The Park System Plan, initiated in 1985/86, proposes a long-term priorized plan for future growth and development of the provincial park system. The plan considers both the protection of representative and unique natural environment areas and the provision of recreation and tourism development opportunities. The Parks System Plan will be available for public review and discussion in 1987/88.

Left: Elbow Harbour Marina was one of many projects coordinated by New Careers Corporation.

Park Visitor Survey

A comprehensive park visitor survey of 16 provincial parks was conducted during the summer of 1986. Its purpose was to collect general information with regard to park land use, visitor activities, participation levels, motivation and satisfaction. As well, data was collected on park visitor expenditure patterns as background for economic studies of the provincial park system. The response rate was over eight per cent with over 3,000 surveys returned. The survey indicated that in general, park visitors tend to be quite satisfied with parks and park programs. The average rating was good for all categories of park programs and delivery for all parks surveyed.

Park Lands-Resource Management Framework

To better manage resource extraction activities on park lands without jeopardizing the department's protection or recreation goals, policy guidelines are required that are consistent with park classification and zoning. A study completed during the year presents a decision-making tool to assist managers in the resource development, review and regulation process.

Pike Lake Study

An evaluation study of the potential effects of aquatic weed harvesting on the recreation quality of Pike Lake was done in 1985. Weed harvesting was again undertaken in 1986 over larger areas of the lake. A five-year management plan, including cost estimates, was prepared for continued weed harvesting and other potential lake restoration methods for Pike Lake.

Park Advisory Committee

A Minister's Advisory Committee was formed in 1986 to review current programs, identify needs and recommend action on a variety of park issues. Groups represented included the Saskatchewan Urban Municipalities Association, Saskatchewan Association of Rural Municipalities, Saskatchewan Regional Parks Association, Saskatchewan Parks and Recreation Association, Saskatchewan Natural History Society, Saskatchewan Wildlife Federation, Sierra Club, Saskatchewan Archaeology Society and the Canadian Parks and Wilderness Society.

Park Programs

Recreation Programs

Throughout 16 provincial parks, more than 72,000 park visitors participated in summer recreation, aquatic and interpretive programs in 1986/87.

New portable interpretive displays were placed at Cypress Hills, Douglas, Duck Mountain and Meadow Lake Provincial Parks.

The Moose Jaw Wild Animal Park "Great Guess the Birthday Game" was expanded to all grade 6 classes in the province with 25 schools entering. A park interpreter was hired for the first time to deliver programs to spring school groups. Approximately 161,650 people visited the Wild Animal Park in 1986/87.

Special interpretive presentations were initiated in the parks through the co-operation of the Saskatchewan Natural History Society and the Museum of Natural History. Other special events included environmental puppeteering programs and a Seniors Day.

During July, Canada Day celebrations were held, and Parks Week environmental awareness activities drew over 8,000 participants.

Winter programs suffered from a late, mild winter; however, 30 events in 15 park areas took place attracting more than 4,400 participants. A winter interpretive program kit was developed for groups using the parks. The Snowonder milk carton campaign was very successful with over 5,000 requests received for Snowonder mini-magnets.

Historic Parks Program

With the passage of the new Parks Act, nine areas were upgraded to provincial park status. They were: Cannington Manor, Fort Pitt, Wood Mountain Post, Fort Carlton, Cumberland House, Last Mountain House, St. Victor's Petroglyphs, Steele Narrows and Touchwood Hills Post.

A strategy which will provide direction for the provincial historic parks over the next five years was completed and the associated capital developments were identified.

At Cannington Manor a reconstruction of the 1890s carpenter shop was opened to the public. At Last Mountain House, introductory displays and period furnishings were designed and acquired for placement. Land was added to Fort Pitt to provide further protection for the archaeological resources within the park. New brochures on Cumberland House and Wood Mountain Post were added to the historic park series.

The interpretive programs and displays attracted over 7,000 students and 25,000 non-student visitors during the mid-May to Labour Day period.

Regional Parks Program

The 101 regional parks are operated by their own park authorities, while the province and local municipalities provided funding for their maintenance and capital development. In 1986, the province provided approximately $2.5 million in capital and maintenance grants while sponsoring bodies provided about $1.3 million. There were more that three million visits to the regional parks in 1986. They generated $4.8 million in direct revenue with substantial spin-off benefits to local communities.

Echo Valley Conference Centre

Echo Valley Centre hosted over 280 groups ranging in size from 10 to 200 during the year. Approximately 1,000 students were enrolled in the Saskatchewan School of the Arts. During 1986/87, 30,000 bed/nights were occupied and 75,000 meals were served.

Improvements were made to washrooms, guestrooms and the interior sprinkler system at the centre.

Park Security

During the year, park officers evicted 244 persons and gave 391 notices of violation (warnings) compared to 399 evictions and 426 notices of violation the previous year. Convictions resulting from infractions of various sections of The Parks Act and regulations totalled 401 in 1986/87 compared to 315 last year.

Park Development

Facility Development

The department carried out a $3.5 million capital program. Some of the projects undertaken in provincial parks and recreation sites were:

- electrification of 121 campsites at Lac La Ronge, Meadow Lake and Echo Valley Provincial Parks and Chitek Lake Recreation Site
- campground expansion and improvements at Greenwater, Meadow Lake, Good Spirit Lake, Blackstrap, Saskatchewan Landing and Cypress Hills Provincial Parks and Hackett Lake and Nisbet Recreation Sites
- construction and upgrading of public use facilities such as service centres, bath/changehouses, recreation halls, picnic tables, outdoor toilets and barbecues in provincial parks and recreation sites throughout the province
- improvements to boat launch facilities in Crooked Lake and Saskatchewan Landing Provincial Parks and Chitek Lake Recreation Site
- beach, lake and shoreline improvements at Greenwater, Good Spirit, Buffalo Pound, Battlefords and Saskatchewan Landing Provincial Parks and Tobin and Cowan Lakes
- upgrading of sewage facilities in Echo Valley Provincial Park and recreation sites in the La Ronge and La Loche areas
- completion of the sewage collection system at Battlefords Provincial Park
- resource road construction and upgrading for the Woody River, River Valley, McBride Lake, Little Swan, North Leoville, and Lac Eau Claire roads
- conversion to natural gas at the Prince Albert Nursery and buildings within Buffalo Pound Provincial Park
- water system improvements in Meadow Lake, Greenwater, Buffalo Pound and Cypress Hills Provincial Parks
- drilling for and servicing potable water supplies in various locations and testing potable water supplies in all provincial parks, recreation sites and picnic areas
- tree planting in various parks and recreation sites
- landscaping and irrigation system improvements in Meadow Lake, Rowan's Ravine, Pike Lake, Danielson, Saskatchewan Landing and Cypress Hills Provincial Parks
- public safety improvements to timber wolf pens at Moose Jaw Wild Animal Park and construction of an additional pen for the swift fox program
- site improvements to Cannington Manor, Last Mountain House, Fort Carlton and Fort Pitt Provincial Historic Parks
- Installation of security systems at Last Mountain House and Cannington Manor Provincial Parks

New Careers Corporation

The department provided engineering design, construction drawings and project co-ordination for the following New Careers Corporation projects:

- campground office at Saskatchewan Landing Provincial Park

- irrigation pump and mainline at Douglas Provincial Park
- north shore campground at Lac Des Isles in Meadow Lake Provincial Park
- houseboat mooring, marina and golf course at Elbow Harbour Marina
- marina at Rowan's Ravine Provincial Park

Commercial Leases

During the year, the department entered into 84 commercial lease agreements which covered 96 different facilities leased to the private sector. Types of facilities operated by the private sector included miniature golf, boat rentals, fast food services, stores and riding stables. As a result, more than $230,000 of lease revenue was generated.

Private Investment Program

The department continued to encourage commercial development opportunities in provincial parks and recreation sites by the private sector. During the year, 13 new businesses were established attracting more than $4.6 million in private capital investment, 33 person years of construction employment and 28.5 person years of operating employment.

New proposals approved during the year for facilities to be constructed or in operation by 1987/88 included new accommodation complexes in Duck Mountain, Moose Mountain and Cypress Hills Provincial Parks; a new miniature golf at Moose Mountain Provincial Park; golf course improvements at Cypress Hills Provincial Park, and improvements to the ski hill at Blackstrap Provincial Park.

Canadian Heritage Rivers System

The Clearwater River, situated in northwestern Saskatchewan, was designated as a Canadian Heritage River in June, 1986 when a management plan was accepted by the Canadian Heritage Rivers Board. In August, under the new Parks Act, the Clearwater River became Saskatchewan's first wilderness provincial park.

Tables

Table No. 1 Forest Industry Employment April 1/86 — March 31/87

Where Employed	Person Years
Direct Employment	
Office	145.50
Plant or Mill	1329.10
Woodlands:	
— Company	410.50
— Contractors	876.50
Total Direct	2761.60
Indirect Employment	4375.00
Total	**7136.60**

Source: A Directory of Primary Wood-Using Industries in Saskatchewan

Table No. 2 Value of Forest Products

Product	Volume Used in Production (m^3)	Value ($/m^3$)	Total Value 1986/87 $	Total Value 1985/86 $
Sawtimber	1,175,187	38.00	44,657,106	57,745,682
Posts	29,125	193.64	5,639,882	4,722,984
Poles	3,507	36.43	127,746	229,143
Rails	4,617	77.66	358,556	443,485
Ties	2,061	236.82	488,086	2,728,977
Piling & Round Timber	4,154	47.70	198,146	1,085,587
Fuelwood	97,609	16.20	1,581,266	5,384,470
Waferboard, Kraft Pulp & Plywood	1,706,405	124.46	212,376,056	91,061,694
Total	**3,022,665**	**770.91**	**265,426,844**	**163,402,022**

Table No. 3 Forest Revenue (from Provincial Forests & Provincial Lands) from April 1, 1986 - March 31, 1987

Dues, Fees & Royalties		
Pulpwood:		
Weyerhaeuser	$ 630,726.40	
Other Operators	2,040.64	$ 632,767.04
Sawtimber:		
Simpson Timber Company	$ 804,560.50	
Saskatchewan Forest Products	268,030.59	
Meadow Lake Sawmill	185,418.15	
L & M Wood Products	20,812.66	
Northern Forest Operations	48,766.63	
Weyerhaeuser Canada Ltd.	190,650.44	
Other Operators	68,253.74	$1,586,492.71
Other Products:		
Saskatchewan Forst Products	$1,363,909.84	
L & M Wood Products	14,201.82	
Lehner Wood Preservers	15,332.94	
Vermette Wood Preservers	15,856.28	
MacMillan Bloedel	104,761.33	
Other Operators	81,501.88	$1,595,564.09
Total for Dues, Fees & Royalties		**$3,814,823.84**
Licences & Permits[1]		$ 157,551.93
Penalties and Interest[2]		$ 23,370.32
Sales and Services[3]		$ 3,040.75
Other Charges and Levies[4]		$ 25,387.76
Grand Total for Forests		**$4,024,174.60**

[1] Includes sawmill licences, Forest Management Licence, grazing, timber, hay, wild rice, peat and sphagnum moss permits.

[2] Includes waste of merchantable timber, overcut timber dues, timber seizures sales, overcut hay dues, hay seizure sales.

[3] Includes timber sales and other services.

[4] Includes fire prevention levy and ground rent charges.

Table No. 4 Provincial Forest Fire Summary

Cause	No. of Fires	Total % of Fires	Area Burnt (ha)	% of Total Area Burned
Recreation	140	28	174.47	1
Resident	95	19	5,458.51	41
Forest Industry	10	3	70.71	1
Railroads	3	1	25.00	—
Other Industry	1	—	10.00	—
Incendiary	70	14	83.00	1
Miscellaneous	20	4	8.93	—
Lightning	128	26	7,323.35	56
Unknown	26	5	5.21	—
Total	**493**	**100**	**13,159.18**	**100**

Table No. 5 Tree Planting and Scarification 1986/87

	# of Trees Planted	# of Hectares Treated
Tree Planting:		
Forestry Branch:		
— Connell Creek	2,093,750	1043.30
— White Fish	847,200	642.70
— Divide	508,400	279.40
SPRC Regions:		
— La Ronge	200,250	93.20
— Meadow Lake	612,000	371.00
— Prince Albert	406,700	165.20
— Hudson Bay	534,000	278.10
Total SPRC Tree Planting	**5,202,300**	**2872.90**
Industry:		
— Simpson Timber Co.	950,000	521.90
— Weyerhaeuser	1,682,570	980.10
— Saskatchewan Forest Products	166,500	107.00
Total Industry Planting	**2,799,070**	**1609.00**
Total Tree Planting	**8,001,370**	**4481.90**
Scarification:		
Weyerhaeuser		1525.60
Saskatchewan Forest Products		221.50
L & M Wood Products		120.00
Meadow Lake Sawmill		157.00
Saskatchewan Parks, Recreation & Culture		23.00
Total hectares scarified		**2047.10**

Reforestation Summary:

Area Planted — Government	— 2872.90
Area Planted — Industry	— 1609.00
Area Scarified	— 2047.00
Total Area Reforested	**6528.90**

* Scarification is the operation of breaking up the forest floor and top soil preparatory to natural regeneration. The certain forest types for which this treatment is applicable will require no planting.

Table No. 6 Estimated Depletion of Standing Timber (cubic metres)

Region	By Use	By Fire (Within the Provincial Forest)	Total 1986-87	Total 1985-86
Hudson Bay	1,039,142	5,378	1,044,520	1,005,850
Prince Albert	1,537,112	2,152	1,536,251	958,060
Meadow Lake	340,256	94,562	434,818	841,239
La Ronge	100,463	22,171	122,634	215,723
Melville	2,477	—	2,477	5,845
Saskatoon	480	—	480	342
Regina	373	—	373	275
Swift Current	2,362	—	2,362	2,395
Creighton	—	—	—	94,000
Total	**3,022,665**	**124,263**	**3,143,915**	**3,123,729**

Table No. 7 Provincial Parks[1]: Number of Vehicle Entries, 1977-1986 (Victoria Day Weekend - Labour Day Weekend)

Location	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
The Battlefords	59,500	63,943	55,310[7]	52,341	52,857	58,164	65,281	57,149	77,995	66,198
Blackstrap	19,725	19,625	12,165	10,526	18,542	17,891	16,408	15,832	14,569	14,402
Buffalo Pound	41,024	48,166	41,506	38,387	44,473[3]	40,973	33,139	37,285	29,192	32,400
Candle Lake	73,550	98,918	86,291[7]	131,126[7]	218,938	237,536	137,669	72,408[5]	49,258	56,697
Crooked Lake	14,386	8,808	9,978	10,604	11,640	15,959	13,362	24,162	13,821	12,046
Cypress Hills	63,787	55,464[7]	56,638	64,579	77,911[7]	74,969	73,402	61,586	49,457	60,678
Danielson	29,077[7]	28,375[7]	40,486	30,483	35,852	39,692	32,899	36,048	30,329	29,656
Douglas	10,868	12,184[7]	12,400	18,685	23,625	23,906	21,217	22,531	21,455	15,013
Duck Mountain	92,215	96,075	115,929	89,198	72,698	85,122	101,272	81,332	80,881	78,427
Echo Valley	79,735	83,368	102,167	80,544	93,162	52,940	54,502	66,959	56,677	23,590
Good Spirit Lake	25,975	35,316	47,147	32,124	31,568	33,763	31,576	36,671	35,144	38,590
Greenwater Lake	38,659	39,548	40,860	37,493	35,400[7]	35,500[7]	35,600[7]	34,724[7]	36,102[7]	40,082
Katepwa Point	12,489	12,027	14,378	7,357	6,636	14,716	11,231	13,948	9,971	8,980
Lac La Ronge	36,444	51,882	47,961	26,248[2]	—	5,060[6]	19,179[4]	44,268[4]	42,782	34,121
Makwa Lake	101,938	90,783	86,224	93,918	104,247	121,949	86,455	101,806	36,725[6]	34,557
Meadow Lake	97,346	89,086	75,137	75,526	110,366	78,735[2]	75,535	79,154	83,223	79,705
Moose Mountain	158,728[7]	159,779	145,931[2]	160,857	150,091	143,681	130,857	146,771	139,600	172,322
Nipawin	5,686	15,980	13,514[7]	13,162[7]	34,935[3]	17,562[2]	12,377	12,498	13,970	8,785
Pike Lake	46,088	56,506	41,157	44,513	47,105	42,239[7]	38,442	32,191	33,291	48,436
Rowan's Ravine	40,349	43,049	27,919	25,336	27,195	40,062	26,675	26,557	22,631	13,620
Sask. Landing	32,799	38,588	41,579	52,993	57,143	45,042	53,253	51,047	54,152	57,440
Totals (21)	1,080,368	1,147,470	1,114,677	1,096,000	1,254,384	1,225,461	1,070,331	1,054,927	931,225	925,745

[1] Provincial parks for which visitation data is available, as per revisions to The Parks Act, 1986
[2] 1 less traffic counter than previous year
[3] 1 more traffic counter than previous year
[4] 2 more traffic counters than previous year
[5] 2 less traffic counters than previous year
[6] 3 less traffic counters than previous year
[7] Figures have been adjusted from those previous reported.

Table No. 8 Big Game Harvest & Recreation Days By Species: 1984-1986

	1986	
	Harvest	Rec. Days
White-tailed Deer	34,742	190,203
Moose	3,566	49,973
Elk	868	16,913
Mule Deer	9,650	23,392
Antelope	2,534	6,281
*Woodland Caribou	* 45	516
Black Bear	2,391	25,731

* Woodland Caribou figures based on 1985 estimates or 1986 field contacts.

Table No. 9 Game Bird Harvest & Recreation Days By Species: 1984-1986

	1986	
	Harvest	Rec. Days
Ducks	181,077	63,509
Geese	159,111	56,126
Sandhill Crane	7,480	1,659
Sharp-tailed Grouse	78,565	28,761
Hungarian Partridge	92,270	25,126
Ruffed Grouse	47,978	12,829
Spruce Grouse	11,883	3,219
Pheasant	10,557	4,991

Table No. 10 Hunting and Trapping Licence Sales and Revenues

	Number	Revenue
Game Bird		
Saskatchewan Resident Game Bird	41,317	$ 413,170
Canadian Resident Game Bird	2,158	107,900
Non-resident Game Bird	3,731	373,100
Total Game Bird	**47,206**	**$ 894,170**
Big Game		
1st Saskatchewan Resident Barren-ground Caribou	33	600
2nd Saskatchewan Resident Barren-ground Caribou	18	360
1st Saskatchewan Resident Bear	3,975	59,625
2nd Saskatchewan Resident Bear	448	6,720
1st Canadian Resident Bear	95	4,750
2nd Canadian Resident Bear	6	300
1st Non-resident Bear	595	59,500
2nd Non-resident Bear	115	11,500
Saskatchewan Resident Woodland Caribou	119	3,570
Canadian Resident Woodland Caribou	5	750
Non-resident Woodland Caribou	9	2,700
1st Saskatchewan Resident White-tailed Deer	47,698	1,192,450
1st Canadian Resident White-tailed Deer	491	49,100
1st Non-resident White-tailed Deer	157	31,400
1st Saskatchewan Resident Archery White-tailed Deer	1,336	33,400
1st Saskatchewan Resident Muzzleloader White-tailed Deer	586	14,650
1st Saskatchewan Antlerless White-tailed Deer	1,152	28,800
Saskatchewan Resident Elk	2,757	82,710
Saskatchewan Resident Regular Moose	9,033	270,990
Guided Moose: Canadian and Non-resident	208	62,068
Big Game Draw		
Special Elk	1,241	37,230
Special Moose	2,088	62,640
Special Moose Archery	31	930
Antelope	2,983	89,490
Antelope Archery	296	8,880
Either-sex Mule Deer	6,860	210,360
Either-sex Mule Deer Archery	948	28,440
Antlerless Mule Deer	4,046	125,070
Antlerless Mule Deer Archery	67	2,010
Muzzleloading Either-sex Mule Deer	152	4,560
Muzzleloading Antlerless Mule Deer	123	3,690
Total Big Game	**87,671**	**$2,489,243**
Trapping		
South Saskatchewan Fur	14,966	149,660
North Saskatchewan Fur	2,877	28,770
Total Trapping	**17,843**	**$ 178,430**
Total Receipts, Game and Fur Licences	**152,720**	**$3,561,843**

Table No. 11 1986-87 Fish and Wildlife Development Fund

	Fisheries	Wildlife	Total
Opening Fund Balance			$1,121,156
Revenues	$583,332	$936,298	1,519,630
Expenditures	980,647	717,471	1,698,118
Excess of Revenues over Expenditures	(397,315)	218,827	(178,488)
Ending Fund Balance			942,668

** these are unaudited figures

Table No. 12 Fisheries Licence Sales 1986-87

Sport	Number Sold	Dollar Revenue
Resident	165,421	$1,654,210
Non-Resident	19,096	381,920
One Day	2,128	84,512
Total	**186,645**	**$2,120,642**
Commercial		
Fish Processing Plant	6	$ 235
Commercial Net *	1,852	31,391
Brine Shrimp	7	140
Bait Fish	68	1,360
Fish Farm		
Private	2,397	—
Commercial	139	2,160
Fur Farm	2	344
Total	**4,471**	**$ 35,630**
Domestic		
Domestic Net	569	$ 2,986

* Commercial Net and Franchise Fees combined

Table No. 13 Commercial Fish Production and Value 1986-87

	Kgs.	Lake Value
Whitefish	1,311,484	$ 868,241
Walleye	508,091	985,217
Pike	806,207	485,707
Trout	486,745	588,897
Others	630,601	166,152
Total	**3,743,128**	**$3,094,216**

Table No. 14 Summary of Fish Stocking

Species	Number Stocked	Number of Waters Stocked
Arctic Grayling Fry	394,000	9
Walleye		
Fry	32,340,000	55
Fingerlings	270,589	12
Adults	100	1
Whitefish Fry	10,000,000	3
Brook Trout Fingerlings	166,500	42
Brown Trout		
Fingerlings	24,000	11
Adults	20	1
Kokanee Salmon Fingerlings	8,843	1
Rainbow Trout		
Fingerlings	1,129,236	66
Catchables	6,221	3
Adults	1,786	5
Northern Pike		
Fry	120,000	2
Fingerlings	125	2
Adults	279	3
Perch Adults	15,960	11
Largemouth Bass Fingerlings	10,000	1
Smallmouth Bass Fingerlings	5,000	1
Total	**44,492,859**	**229**